

3/5/2018

Print



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200

## Purchasing Receipts

| PO No    | Supplier  | Line Item No | Rel No | Terms  | Purchased Item   | Description   | For Part No | Project | Equipment ID | Order Qty | Due Date | Received Quantity | Accounting Job No | Container No       | Status | Receive Date | Price/Unit    | Aging Days | Past Due |  |
|----------|-----------|--------------|--------|--------|------------------|---|-------------|---------|--------------|-----------|----------|-------------------|-------------------|--------------------|--------|--------------|---------------|------------|----------|--|
| PO039137 | ACI001-VC | 2            | 1      | Net 30 | M304S22GA4P      | 304/316 Sheet .032 :<br>MATERIAL:<br>AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf |             |         |              | 64        | 3/6/2018 | 64                |                   | S047936            | Stock  | 3/5/2018     | \$ 3.49 / sf  | 0          |          |  |
|          |           | 3            |        |        | M1018R3.500      | M1018R3.500 :<br>MATERIAL:<br>AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft   |             |         |              | 6         |          | 6                 |                   | S047937            | Stock  | 3/5/2018     | \$ 31.09 / ft | 0          |          |  |
|          |           | 4            |        |        | M4140N-R3.250    | 4140 Steel Round Bar 3.250" receive ft  |             |         |              |           |          | 6                 |                   | S047938            | Stock  | 3/5/2018     | \$ 53.33 / ft | 0          |          |  |
|          |           | 7            |        |        | M304TR1.750W.120 | 304 Seamless Tubing 1.75 X .120W :<br>MATERIAL:<br>AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft                 |             |         |              | 12        |          | 20                |                   | S047939            | Stock  | 3/5/2018     | \$ 30.83 / ft | 0          |          |  |
|          |           | 8            |        |        | D6201P           | T Extrusion 4X4X3/8 as per dwg d6201 rev. b B173203   |             |         |              | 20        |          | 20                |                   | S047940<br>S047948 | Stock  | 3/5/2018     | \$ 20.25 / ft | 0          |          |  |
| Total:   |           |              |        |        |                  |   |             |         |              | 108       |          | 116               |                   |                    |        |              |               |            |          |  |

Plex 3/5/2018 2:33 PM Dart.Dubois.Pascal



## DELIVERY - CLIENT

Copy

CO00075960

**ACIER OUELLETTE INC.**  
935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

### Billed to

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Customer N°

CLI0001056

Date

2018/02/27

Delivery date

2018/03/05

Your order N°

039137

Processed by

Josianne Bourdon

Salesman

Carrier

OUELLETTE VALLEYFIELD

Credit Terme

Net 30 Days

Page

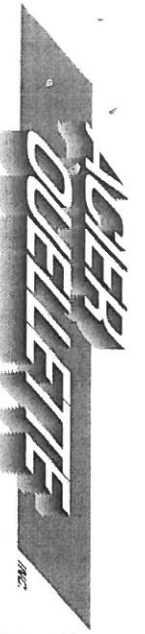
1

| Product Description  | Weight | Qty   | U/M       | PCS NB |     |     | Internal Use Only |          |   |   |
|--|--------|-------|-----------|--------|-----|-----|-------------------|----------|---|---|
|  |        |       |           | CMD    | EXP | B/O | IN                | I        | S | C |
| 1 SHEET SS 22G SS304 #4 (4 X 8)<br>FESS-22G483044 3437<br>2 X 4' X 8' HEAT: L2230456         | 84.03  | 64.00 | PI2_\$CLB |        |     |     | 64mm              | DAS 9-83 |   |   |
| 2 ROUND CR 3 1/2 1018 (R)<br>RCR-312 5323<br>1 X 6' HEAT: 42180<br>COUPE A LA SCIE<br>SCIE 1 | 196.26 | 6.00  | PI_\$CLB  |        |     |     | 61                | DAS 9-83 |   |   |
| 3 ROUND 4140 ANNEALED 3 1/4 (R) *<br>R4140-314A 4943<br>1 X 6' HEAT: 228699                  | 175.80 | 6.00  | PI_\$CLB  |        |     |     | 61                | DAS 9-83 |   |   |

NIR : R-109516-6

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Next Page...



## DELIVERY - CLIENT

Copy

CO00075960

**ACIER QUELLETTE INC.**

935, Boul. du Hâvre  
Salaberry de Valleyfield (Québec) J6S 5L1  
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N°

CL10001056

Date

2018/02/27

Delivery date

2018/03/05

Your order N°

039137

Processed by

Josianne Bourdon

Salesman

QUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Credit Terme

### Billed to

DART AEROSPACE LTD  
1270, ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

2

| Product Description   | Weight | qty   | U/M      | PCS NB |     |     | Internal Use Only     |   |   |   |     |
|---|--------|-------|----------|--------|-----|-----|-----------------------|---|---|---|-----|
|   |        |       |          | CMD    | EXP | B/O | IN                    | I | S | C | OUT |
| TRANSIT ST-JEROME LE 01/03<br><br>COUPE A LA SCIE<br>SCIE<br>1  |        |       | 1.00 UN  |        |     |     |                       |   |   |   |     |
| 5 TUBE ROUND SS 1.750 OD X .120 SS304 MF RANDOM NS<br>TRSS-1750120ME-V 9055<br><br>1 X 20' R/L HEAT: YOL6<br>AC13903-CF-28/02 | 41.80  | 20.00 | PI_\$CPI |        | 20' |     | 20' DAS<br>11<br>9-09 |   |   |   |     |
| 6 T-BAR ALU 4 X 4 X 3/8 * 6061T6<br>TBAI-4438 6434<br><br>1 X 20' HEAT: 852198<br>AC13904-GR-28/02                            | 68.60  | 20.00 | PI_\$CLB |        | 20' |     | 20' DAS<br>11<br>9-09 |   |   |   |     |

### Conditions :

All sold and delivered materials remain the property of "Acier Quellette Inc." until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Quellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Quellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Total Weight (lbs) : 566.49

NIR : R-109516-6

Prepared By :

Verified By :

Delivered By :

Time

Customer's Signature

Date

Total (\$CAD)



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# PURCHASE ORDER

## PO039137

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO039137

**PO Date:** 2/27/18

**Due Date:** 3/7/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
Phone: clavoie@dartaero.com

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pynt Terms:** Net 30

**Freight Terms:**

**Special Comments:** quotation no: sou0088460

**E-MAILED**  
FEB 27 2018

### Items

| Line Item | Part                   | Supplier Part No | Description  | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
|-----------|------------------------|------------------|--|--------|----------|----------------|-------------------|---------|------------------|----------------|
| 1         | M2024T3S.100           |                  | 2024-T3 .100 Sheet<br>: MATERIAL:<br>2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf                          | Firmed | 3/7/18   | 48 sf          | 0 sf              | 48 sf   | \$17.1875/sf     | \$825.00       |
| 2         | M304S22GA4P            |                  | 304/316 Sheet .032<br>: MATERIAL: AISI 304/316 SS SHEET ANNEALED AS PER MIL-S-5059 OR AMS 5513 (304) OR AMS 5524 (316) OR ASTM A240 OR ASME SA240 receive sf | Firmed | 3/7/18   | 64 sf          | 0 sf              | 64 sf   | \$3.491875/sf    | \$223.48       |
| 3         | M1018R3.500            |                  | M1018R3.500 : MATERIAL: AISI 1018-1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108 receive ft  | Firmed | 3/7/18   | 6 ft           | 0 ft              | 6 ft    | \$31.09/ft       | \$186.54       |
| 4         | M4140N-R3.250          |                  | 4140 Steel Round Bar 3.250" receive ft   | Firmed | 3/7/18   | 6 ft           | 0 ft              | 6 ft    | \$53.3333/ft     | \$320.00       |
| 5         | MT-4140-S-1.250X11.000 |                  | AISI 4140 Steel Sheet/Plate  | Firmed | 3/7/18   | 12 ft          | 0 ft              | 12 ft   | \$116.00/ft      | \$1,392.00     |

Plex 2/27/18 8:37 AM dart.lavoie.chantal

| Items  |                       |                  |  |        |          |                |                   |         |                  |                |
|--|-----------------------|------------------|--|--------|----------|----------------|-------------------|---------|------------------|----------------|
| Line Item  | Part                  | Supplier Part No | Description  | Status | Due Date | Order Quantity | Received Quantity | Balance | Unit Price (CAD) | Extended Price |
| Line Item Note 2 pcs of 6ft  |                       |                  |  |        |          |                |                   |         |                  |                |
| 6  | MT-4140-S-0.375X5.500 |                  | AISI 4140 Steel Sheet/Plate  | Firmed | 3/7/18   | 6 ft           | 0 ft              | 6 ft    | \$31.3333/ft     | \$188.00       |
| 7  | M304TR1.750W.120      |                  | 304 Seamless Tubing 1.75 X .120W<br>: MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING AS PER ASTM A213 OR ASME SA213 OR ASTM A269 receive ft | Firmed | 3/7/18   | 12 ft          | 0 ft              | 12 ft   | \$30.83333/ft    | \$370.00       |
| 8  | D6201P                |                  | T Extrusion 4X4X3/8 as per dwg d6201 rev. b B173203  | Firmed | 3/7/18   | 20 ft          | 0 ft              | 20 ft   | \$20.25/ft       | \$405.00       |
| Grand Total:   |                       |                  |  |        |          |                |                   |         |                  | \$3,910.02     |
| Order Notes  |                       |                  |  |        |          |                |                   |         |                  |                |
| <p>Procurement Quality Clauses</p> <p>A005 right of entry</p> <p>A012 chemical and physical test report</p> <p>A016 personnel qualification</p> <p>A017 raw material identification (as applicable)</p> <p>A026 certification of material conformance</p> <p>A041 quality management system</p> <p>A042 dart notification by supplier</p> <p>A043 retention of quality documents</p> <p>A048 counterfeit parts avoidance, detection, mitigation and disposition program</p> <p>A049 supplier awareness</p> <p>Terms &amp; Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit <a href="http://www.dartaerospace.com">www.dartaerospace.com</a> for further explanation.</p> |                       |                  |  |        |          |                |                   |         |                  |                |

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# ACIER OUELLETTE INC.

935, Boul. du H vre  
Salaberry de Valleyfield (Qu bec) J6S 5L1  
T l.: 450-377-4248 M l: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 M l: 514-336-4246 Ext.: 866-456-4242

## Quotation

SOU0088460

### Billed to

DART AEROSPACE LTD  
1270 , ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

### Shipped to

, Ontario,

Att : CHANTAL LAVOIE T l.: 613-632-5200

### Customer N 

CLI0001056

### Date

2018/02/26

### Revision N 

0

### Prices valid until

2018/03/05

### Your Order N 

### Processed by

Josianne Bourdon

### Salesman

JOSIANNE

### Carrier

OUELLE SDV

### Credit Terms

Net 30 Days

### Page

1

| Product N  and description   | Weight | Qty   | U/M       | Qty   | U/M | Price | Pcs Nb | Price   | Amount   |
|--|--------|-------|-----------|-------|-----|-------|--------|---------|----------|
| AL. FEUILLE .100 2024T3<br>N<br>1 X 4' X 12' 4-5 DAYS  | 0.00   | 1.00  | UN        | 1.00  | UN  |       | 1.00   | 825.000 | 825.00   |
| SHEET SS 22G SS304 #4 (4 X 8)<br>FESS-22G483044 3437<br>2 X 4' X 8' STOCK                            | 84.03  | 64.00 | PI2_\$CLB | 2.00  | UN  |       | 2.00   | 111.740 | 223.48   |
| ROUND CR 3 1/2 1018 (R) *<br>RCR-312 5323<br>1 X 6' STOCK<br>COUPE A LA SCIE<br>SCIE 1               | 196.26 | 6.00  | PI_\$CLB  | 6.00  | PI  |       | 1.00   | 186.540 | 186.54   |
| SQUARE 4140 HT 1/2<br>N<br>1 X 8' 7-10 DAYS  | 0.00   | 1.00  | UN        | 1.00  | UN  |       | 1.00   | 276.000 | 276.00   |
| ROUND 4140 ANNEALED 3 1/4"<br>N<br>1 X 6' 2-3 DAYS   | 0.00   | 1.00  | UN        | 1.00  | UN  |       | 1.00   | 320.000 | 320.00   |
| PLATE 4140 HT 1 1/4<br>N<br>2 X 11" X 72" 7-10 JOURS   | 0.00   | 2.00  | UN        | 2.00  | UN  |       | 2.00   | 696.000 | 1 392.00 |
| PLATE 4140 HT 3/8<br>N<br>1 X 5 1/2" X 72" 7-10 DAYS   | 0.00   | 1.00  | UN        | 1.00  | UN  |       | 1.00   | 188.000 | 188.00   |
| TUBE ROUND SS 1.750 OD X .120 SS304 MF<br>RANDOM NS<br>TRSS-1750120MF-V 9055<br>1 X 20' R/L 2-3 days | 41.80  | 20.00 | PI_\$CPI  | 20.00 | PI  |       | 1.00   | 370.000 | 370.00   |
| T BAR ALUMINIUM 6061T6 4 X 4 X .378<br>N<br>1 X 20' 2-3 DAYS   | 0.00   | 1.00  | UN        | 1.00  | UN  |       | 1.00   | 405.000 | 405.00   |

Date :

Next Page...

Date : \_\_\_\_\_ Total (\$CAD) 4 734.67

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304Ti 1.750W.120

PO / BATCH NO.: 039137/5047939

DATE: MAR 05 2018

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 20'  
 QUANTITY INSPECTED: 20'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.120  
 THICKNESS RECEIVED: W.120  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION  | NCR<br>(Check<br>Y/N) | COMMENTS    |
|--|-----------------------|-------------|
| SURFACE DAMAGE                                     | Y (N)                 |             |
| CORRECT FINISH                                     | (Y) (N)               |             |
| CORROSION  | Y (N)                 |             |
| CORRECT GRAIN DIRECTION                            | (Y) (N)               |             |
| CORRECT MATERIAL PER M-DRAWING                     | (Y) (N)               | Actm A534   |
| CORRECT THICKNESS                                  | (Y) (N)               |             |
| PHOTO REQUIRED                                     | Y (N)                 |             |
| CORRECT REF # TO LINK CERT                         | (Y) (N)               | Heat # 7066 |
| CORRECT MATERIAL IDENTIFICATION                    | (Y) (N)               |             |
| CORRECT M# ON THE MATERIAL                         | (Y) (N)               |             |
| DOES THIS MATERIAL REQUIRE<br>ENGINEERING SIGN OFF | Y (N)                 |             |
| DOES THIS REQUIRE AN<br>EXTRUSION REPORT           | Y (N)                 |             |

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

|                              | HRC | HRB | DUR A | DUR D | WEBSTER |
|------------------------------|-----|-----|-------|-------|---------|
| TYPE OF MATERIAL             |     |     |       |       |         |
| SIZE OF TEST SAMPLE          |     |     |       |       |         |
| HARDNESS / DUROMETER READING |     |     |       |       |         |

testers located in the Quality Office

| QC 18 INSPECTION   |                                     | ENGINEERING SIGNOFF (if required) |
|--|-------------------------------------|-----------------------------------|
| INSPECTED BY: <u>DAS 11</u><br>DATE: <u>9-89 MAR 05 2018</u> | SIGNED OFF BY: _____<br>DATE: _____ |                                   |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



PURCHASE MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBING

FINISH: *Handwritten:* ASTM A554 MILL FINISH  
OR ASTM A269 MILL FINISH

PART NUMBER: M304TS | A.AAA | W | .TTT

PART NUMBER: EG. 0.75" X 0.75" X 0.049 WALL = M304TS0.750W.049

WHERE: A.AAA = WIDTH IN INCHES  
.TTT = WALL THICKNESS IN INCHES

RELEASED  
2014-05-26  
*Handwritten:* Not

|  |  |     |          |
|--|--|-----|----------|
| D  | "SEAMLESS" REMOVED FROM PURCHASE MATERIAL SPECIFICATION (SEE NCRI 4-3818)                            | DB  | 14.06.20 |
| C  | "SEAMLESS" ADDED TO PURCHASE MATERIAL. ASTM A269 ADDED TO FINISH. REASON: SPEC ADDED FOR 1/2" TUBING | AJS | 08.10.16 |
| B  | DRAWING MOVED TO "B" SIZE BORDER. FINISH ADDED (SEE NCRI 08-045 FOR DETAILS).                        | AJS | 08.08.28 |
| A  | NEW ISSUE  | DS  | 01.06.08 |
| REV.   | DESCRIPTION  | BY  | DATE     |
| DRAWN  | DS   |     |          |
| CHECKED  | DB   |     |          |
| MFG. APPR  | <i>Handwritten:</i> [Signature]  |     |          |
| APPROVED   | <i>Handwritten:</i> [Signature]  |     |          |
| DE APPR  |  |     |          |
| DATE   | 14.05.20   |     |          |
| DART AEROSPACE LTD<br>HAMMERSBURY, ONTARIO, CANADA   |  |     |          |
| DRAWING NO. M304TS   |  |     |          |
| TITLE 304/316 SQUARE TUBING  |  |     |          |
| REV. D   |  |     |          |
| SHEET 1 OF 1   |  |     |          |
| SCALE NONE   |  |     |          |
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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4140A-R3.250

PO / BATCH NO.: 039137/5047938

DATE: MAR 05 2018

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 6'  
 QUANTITY INSPECTED: 6'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 3.250  
 THICKNESS RECEIVED: 3.250  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION  | NCR<br>(Check<br>Y/N) | COMMENTS      |
|--|-----------------------|---------------|
| SURFACE DAMAGE                                     | Y (N)                 |               |
| CORRECT FINISH                                     | (Y) N                 |               |
| CORROSION  | Y (N)                 |               |
| CORRECT GRAIN DIRECTION                            | (Y) N                 |               |
| CORRECT MATERIAL PER M-DRAWING                     | (Y) N                 | A516m A29     |
| CORRECT THICKNESS                                  | (Y) N                 |               |
| PHOTO REQUIRED                                     | Y (N)                 |               |
| CORRECT REF # TO LINK CERT                         | (Y) N                 | Heat # 228699 |
| CORRECT MATERIAL IDENTIFICATION                    | (Y) N                 |               |
| CORRECT M# ON THE MATERIAL                         | (Y) N                 |               |
| DOES THIS MATERIAL REQUIRE<br>ENGINEERING SIGN OFF | Y (N)                 |               |
| DOES THIS REQUIRE AN<br>EXTRUSION REPORT           | Y (N)                 |               |

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.  
 RECORD RESULTS BELOW

|                              | HRC | HRB | DUR A | DUR D | WEBSTER |
|------------------------------|-----|-----|-------|-------|---------|
| TYPE OF MATERIAL             |     |     |       |       |         |
| SIZE OF TEST SAMPLE          |     |     |       |       |         |
| HARDNESS / DUROMETER READING |     |     |       |       |         |

testers located in the Quality Office

| QC 18 INSPECTION   | ENGINEERING SIGNOFF (if required)   |
|--|-------------------------------------|
| INSPECTED BY: <u>DAS 11</u><br>DATE: <u>9-89 MAR 05 2018</u> | SIGNED OFF BY: _____<br>DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



|                  |               |   |                        |
|------------------|---------------|---|------------------------|
| DESIGN<br>#      | DRAWN BY<br># | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br>#     | APPROVED<br># | DRAWING NO.<br>M4140H-R                           | REV. A<br>SHEET 1 OF 1 |
| DATE<br>05.02.21 |               | TITLE<br>4140 ROUND BAR                           | SCALE<br>1:1           |
| A                | 05.02.21      | NEW ISSUE   |                        |

PURCHASE MATERIAL: AISI 4140H ROUND BAR

PER AISI 4140 OR ASTM A304/02/-A-434-BC /

-A193-03-GRADE-B7 / -A29-03 / A322-91 OR

UNS# - G41400

MINIMUM ULTIMATE TENSILE STRENGTH = 100 ksi

MINIMUM YIELD TENSILE STRENGTH = 66 ksi

PART NUMBER: M4140H-R | D.DDD | WHERE D.DDD = DIAMETER IN INCHES  
DIA.

EG.  $\frac{7}{8}$ " ROUND BAR = M4140H-R0.875

RELEASED  
05.03.25

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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M1018R3.500  
 DATE: MAR 05 2018

PO / BATCH NO.: 039137/5047937

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 61  
 QUANTITY INSPECTED: 61  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 3.500  
 THICKNESS RECEIVED: 3.500  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

| DESCRIPTION  | NCR<br>(Check<br>Y/N) | COMMENTS            |
|--|-----------------------|---------------------|
| SURFACE DAMAGE                                     | Y (N)                 |                     |
| CORRECT FINISH                                     | (Y) N                 |                     |
| CORROSION  | Y (N)                 |                     |
| CORRECT GRAIN DIRECTION                            | (Y) N                 |                     |
| CORRECT MATERIAL PER M-DRAWING                     | (Y) N                 | <u>As per A108</u>  |
| CORRECT THICKNESS                                  | (Y) N                 |                     |
| PHOTO REQUIRED                                     | Y (N)                 |                     |
| CORRECT REF # TO LINK CERT                         | (Y) N                 | <u>Heat # 42180</u> |
| CORRECT MATERIAL IDENTIFICATION                    | (Y) N                 |                     |
| CORRECT M# ON THE MATERIAL                         | (Y) N                 |                     |
| DOES THIS MATERIAL REQUIRE<br>ENGINEERING SIGN OFF | Y (N)                 |                     |
| DOES THIS REQUIRE AN<br>EXTRUSION REPORT           | Y (N)                 |                     |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.<br>RECORD RESULTS BELOW |     |     |       |       |         |
|--|-----|-----|-------|-------|---------|
|  | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL   |     |     |       |       |         |
| SIZE OF TEST SAMPLE  |     |     |       |       |         |
| HARDNESS / DUROMETER READING   |     |     |       |       |         |

testers located in the Quality Office

| QC 18 INSPECTION  | ENGINEERING SIGNOFF (if required)   |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS</u><br><u>11</u><br>DATE: <u>9-39</u> <u>MAR 05 2018</u> | SIGNED OFF BY: _____<br>DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR  
SPECIFICATION: MIL-S-7097 OR ASTM A108  
PART NUMBER: M1018-R10.DDD WHERE D.DDD = DIAMETER IN INCHES  
DIA.

EG. 7/8" ROUND BAR = M1018-R0.875

## TOLERANCES:

PER ASTM A108 AS FOLLOWS:

SIZE TOLERANCE  
UP TO 1.5" INCL. +0.000/-0.002  
OVER 1.5" TO 2.5" INCL. +0.000/-0.003  
OVER 2.5" TO 4.0" INCL. +0.000/-0.004  
OVER 4.0" TO 6.0" INCL. +0.000/-0.005  
OVER 6.0" TO 8.0" INCL. +0.000/-0.006

RELEASED  
2012-09-24

|   |   |    |          |
|---|---|----|----------|
| B   | REFORMAT. ADD ASTM A108, ADD TOLERANCES | CP | 12.09.05 |
| A   | NEW ISSUE                               | DS | 01.06.12 |
| REV.  | DESCRIPTION                             | BY | DATE     |
| DESIGN  | DS                                      |    |          |
| DRAWN   | CP                                      |    |          |
| CHECKED   | A-P                                     |    |          |
| MFG. APPR.  | M1018-R                                 |    |          |
| APPROVED  |   |    |          |
| DE APPR.  |   |    |          |
| DATE  | 12.09.05                                |    |          |
| DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA   |   |    |          |
| DRAWING NO. REV. B  |   |    |          |
| M1018-R SHEET 1 OF 1  |   |    |          |
| TITLE SCALE   |   |    |          |
| 1018-1025 ROUND BAR NTS   |   |    |          |
| DATE 12.09.05   |   |    |          |
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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304522G-A4P  
 DATE: MAR 05 2018

PO / BATCH NO.: Q39137/5047936

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 64P2  
 QUANTITY INSPECTED: 64P2  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 226  
 THICKNESS RECEIVED: 226  
 SHEET SIZE ORDERED: 4x8  
 SHEET SIZE RECEIVED: 4x8

| DESCRIPTION                                     | NCR<br>(Check Y/N) |     | COMMENTS               |
|---|--------------------|-----|------------------------|
| SURFACE DAMAGE                                  | Y                  | (N) |                        |
| CORRECT FINISH                                  | (Y)                | N   |                        |
| CORROSION                                       | Y                  | (N) |                        |
| CORRECT GRAIN DIRECTION                         | (Y)                | N   |                        |
| CORRECT MATERIAL PER M-DRAWING                  | (Y)                | N   | <u>As per A240</u>     |
| CORRECT THICKNESS                               | (Y)                | N   |                        |
| PHOTO REQUIRED                                  | Y                  | (N) |                        |
| CORRECT REF # TO LINK CERT                      | (Y)                | N   | <u>Heat # L2230456</u> |
| CORRECT MATERIAL IDENTIFICATION                 | (Y)                | N   |                        |
| CORRECT M# ON THE MATERIAL                      | (Y)                | N   |                        |
| DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF | Y                  | (N) |                        |
| DOES THIS REQUIRE AN EXTRUSION REPORT           | Y                  | (N) |                        |

| CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.<br>RECORD RESULTS BELOW |     |     |       |       |         |
|--|-----|-----|-------|-------|---------|
|  | HRC | HRB | DUR A | DUR D | WEBSTER |
| TYPE OF MATERIAL   |     |     |       |       |         |
| SIZE OF TEST SAMPLE  |     |     |       |       |         |
| HARDNESS / DUROMETER READING   |     |     |       |       |         |

testers located in the Quality Office

| QC 18 INSPECTION  | ENGINEERING SIGNOFF (if required)   |
|---|-------------------------------------|
| INSPECTED BY: <u>DAS</u><br><u>11</u><br>DATE: <u>9-8 MAR 05 2018</u> | SIGNED OFF BY: _____<br>DATE: _____ |

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET  
ANNEALED

SPECIFICATION:

MIL-S-5059  
OR AMS 5513 (304)  
OR AMS 5524 (316)  
OR ASTM A240  
OR ASME SA240

FINISH:

DART M-NUMBER  
IDENTIFIER

1P UNPOLISHED No. 1  
2D UNPOLISHED No. 2D  
3P NONE  
4P POLISHED No. 3  
6P POLISHED No. 4  
7P BUFFED No. 6  
8P BUFFED No. 7  
GA #P BUFFED No. 8

PART NUMBER:

M304S TT GA #P  
GA

WHERE "TT" = GAUGE THICKNESS  
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA  
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

| GAUGE | NOM. THICK.<br>(IN) | THICKNESS<br>RANGE (IN) |
|-------|---------------------|-------------------------|
| 26    | 0.01875             | 0.0178 - 0.019          |
| 25    | 0.021875            | 0.0199 - 0.023          |
| 24    | 0.025               | 0.024 - 0.026           |
| 23    | 0.028125            | 0.027 - 0.029           |
| 22    | 0.03125             | 0.030 - 0.032           |
| 21    | 0.034375            | 0.033 - 0.035           |
| 20    | 0.0375              | 0.036 - 0.040           |
| 19    | 0.04375             | 0.041 - 0.046           |
| 18    | 0.050               | 0.047 - 0.052           |
| 17    | 0.05625             | 0.053 - 0.058           |
| 16    | 0.0625              | 0.059 - 0.065           |
| 15    | 0.0703125           | 0.066 - 0.072           |
| 14    | 0.078125            | 0.073 - 0.083           |
| 13    | 0.09375             | 0.084 - 0.098           |
| 12    | 0.109375            | 0.099 - 0.114           |
| 11    | 0.125               | 0.115 - 0.130           |
| 10    | 0.140625            | 0.131 - 0.145           |
| 9     | 0.15625             | 0.146 - 0.160           |
| 8     | 0.171875            | 0.161 - 0.176           |
| 7     | 0.1875              | 0.182 - 0.194           |
| 6     | 0.2031              | 0.194 - 0.212           |
| 5     | 0.2188              | 0.201 - 0.228           |
| 4     | 0.2344              | 0.225 - 0.243           |
| 3     | 0.2500              | 0.238 - 0.262           |
| 2     | 0.2656              | 0.254 - 0.278           |
| 1     | 0.2813              | 0.269 - 0.293           |
| 0     | 0.3125              | 0.301 - 0.325           |

RELEASED  
2015 FEB 04  
ECN 15-122

|            |  |     |          |
|------------|--|-----|----------|
| D          | ADDED GAUGES 0-7.  | AJS | 15.01.06 |
| C          | DEFINED FINISH OPTION (ZN CB) AND EXAMPLE OF MATERIAL FIN WITH FINISH OTHER THAN 2B (ZN BS). | MB  | 12.09.20 |
| B          | REFORMAT DWG. ADD ASTM/ASME SPECS (ZN D8-1), ADD GAUGE REF (CB-1), REF PAR 08-020A           | CP  | 09.06.01 |
| A          | NEW ISSUE  | DS  | 01.09.24 |
| REV        | DESCRIPTION  | BY  | DATE     |
| DESIGN     | DS   |     |          |
| DRAWN      | AJS  |     |          |
| CHECKED    |  |     |          |
| MFG. APPR. |  |     |          |
| APPROVED   |  |     |          |
| DE APPR.   |  |     |          |
| DATE       | 15.01.06   |     |          |

|   |                  |
|---|------------------|
| DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |                  |
| DRAWING NO.                                       | M304S            |
| REV. D  |                  |
| SHEET 1 OF 1                                      |                  |
| TITLE   | 304/316 SS SHEET |
| SCALE   | NTS              |

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#3437

FESS-226483044

TR-2098

49621

## INSPECTION CERTIFICATE

YIEH MAU CORP.  
YIEH MAU CORP.

INVOICE NO. F17M610

COMMODITY

SPECIFICATION

CUSTOMER

PRIMARY COLD ROLLED STAINLESS STEEL SHEETS  
AISI 304 NO.4 FINISH, WITH NOVACEL BLACK & WHITE PE FILM ON MAIN SIDE, WITH BACK-PASS  
AISI 304  
EMPIRE RESOURCES, INC.

工廠高雄市路竹區安陸路345號  
S46, SHUNAN RD., LU CHU HSUNG  
KAOHSIUNG HSIEN TAIWAN R.O.C.  
TEL: (07) 6672885 FAX: (07) 6673006  
CERTIFICATE NO: F17M610-2  
DATE OF ISSUE: 08/14/2017

| SIZE                      | NO. of Product | Weight in KG NET | Heat No. | ID No.       | Physical Properties<br>Tensile Test<br>QL=50 m/m |             |            |     |     | Chemical Properties (%) |             |             |             |             |             |             |            |  |  |
|---------------------------|----------------|------------------|----------|--------------|--|-------------|------------|-----|-----|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|--|--|
|                           |                |                  |          |              | Y.S.<br>PSI                                      | T.S.<br>PSI | EL.<br>(%) | HRD | HV  | C<br>x 100              | SI<br>x 100 | Mn<br>x 100 | P<br>x 1000 | S<br>x 1000 | NI<br>x 100 | Cr<br>x 100 | N<br>x 100 |  |  |
| .120" (3.0MM) X 48" X 96" | 1              | 1871             | YU183647 | 85S16127A-11 | 307  | 578         | 54         | 86  | 171 | 4.2                     | 43          | 88          | 34          | 2           | 810         | 1818        | 2.8        |  |  |
| .060" (1.5MM) X 48" X 96" | 1              | 1885             | YU183648 | 85S16138B-11 | 308  | 585         | 50         | 87  | 180 | 3.8                     | 42          | 82          | 35          | 11          | 809         | 1808        | 2.9        |  |  |
| .048" (1.2MM) X 48" X 96" | 1              | 1882             | YU183316 | 84S14327A-11 | 288  | 636         | 48         | 84  | 168 | 2.3                     | 33          | 81          | 33          | 4           | 802         | 1812        | 3.5        |  |  |
| .030" (0.8MM) X 48" X 96" | 1              | 1036             | LZ230458 | 84S78053B-11 | 293  | 578         | 61         | 85  | 171 | 2.4                     | 41          | 80          | 33          | 3           | 808         | 1833        | 5.5        |  |  |

154 48 18 YU183647  
 154 48 166 YU183646  
 154 48 186 YU183316  
 154 48 225 LZ230458

4 7557  
Remarks: NO MERCURY CONTAMINATION  
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE.

ASTM A688-15/ASME SA688-15 ANNEALED  
COUNTRY OF MELT AND MANUFACTURE: TAIWAN

PEROTESTING GOOD FOR ALL HEAT NO.  
1. ASME SA208-15/ASME-15 ASTM A240-15/A688-15 TYPE 304  
2. INTERGRANULAR CORROSION IN ACCORDANCE WITH ASTM A262-E  
3. Acidness: P1.2 (per ASTM E18, '05, Other: (ASTM E92, '97)  
4. Tensile Test: ASTM E8M-04  
5. Test Method: C.S. (ASTM E1019, '03)  
6. Other Element: ASTM E1000, '00  
7. MERCURY FREE  
8. SOURCE: YUSCO  
9. CHEMICAL PROPERTIES AND PHYSICAL PROPERTIES COMPLY TO AMS 6513J

YIEH MAU CORP.  
Manager of Quality Assurance System



5323

RCK-312-V



ARANA Y LUPARDO, 2  
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)  
Tfno.: 946480211  
Fax: 946480128  
Email: calpradera@calibradospradera.es  
www.calibradospradera.es

TRA 1834  
49872  
2P

## CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

N° CERTIFICADO / CERTIFICATE NR.: 50152

ALBARAN 50152  
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE  
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

| Nº PEDIDO<br>Purchase Order | DESCRIPCIÓN<br>Description          | ESPESES<br>Thickness | TOLERANCIA<br>TOLERANCE | OF     | MEDIDA<br>Measurement |
|-----------------------------|-------------------------------------|----------------------|-------------------------|--------|-----------------------|
| OU-47949                    | 1018 RED. TORNEADO 88,90 (3 1/2") - | 1.016                | - 0,102 -               | 141121 | 88,90                 |
| VI-48475                    | 1018 RED. ESTIRADO 38,10 (1 1/2")   | 3.224                | - 0,051                 | 141144 | 38,10                 |
| VI-48475                    | 1018 RED. ESTIRADO 44,45 (1 3/4")   | 1.916                | - 0,076                 | 141143 | 44,45                 |
| VI-48475                    | 1018 RED. ESTIRADO 60,33 (2 3/8")   | 1.088                | - 0,076                 | 141139 | 60,33                 |
| PAJ-48144                   | 1018 RED. ESTIRADO 44,45 (1 3/4")   | 1.038                | - 0,076                 | 141273 | 44,45                 |
| PAJ-48144                   | 1018 RED. TORNEADO 74,61 (2 15/16") | 1.068                | - 0,102                 | 141277 | 74,61                 |
| PAJ-48144                   | 1018 RED. TORNEADO 76,20 (3")       | 1.109                | - 0,102                 | 141278 | 76,20                 |
| MN-48543                    | 1018 RED. ESTIRADO 44,45 (1 3/4")   | 2.076                | - 0,076                 | 141426 | 44,45                 |
| MN-48543                    | 1018 RED. TORNEADO 88,90 (3 1/2") = | 2.030                | - 0,102 -               | 141418 | 88,90                 |
| MN-48543                    | 1018 RED. TORNEADO 101,6 (4")       | 2.086                | - 0,102                 | 916872 | 101,60                |
| MN-48543                    | 1018 RED. TORNEADO 74,61 (2 15/16") | 2.140                | - 0,102                 | 141420 | 74,61                 |
| PAR-48683                   | 1018 RED. ESTIRADO 34,93 (1 3/8")   | 1.042                | - 0,051                 | 141601 | 34,93                 |
| PAR-48683                   | 1018 RED. ESTIRADO 60,33 (2 3/8")   | 2.082                | - 0,076                 | 141604 | 60,33                 |
| MJP-48682                   | 1018 RED. ESTIRADO 36,51 (1 7/16")  | 1.048                | - 0,051                 | 916874 | 36,51                 |
| PAR-48683                   | 1018 RED. TORNEADO 76,20 (3")       | 1.109                | - 0,102                 | 141605 | 76,20                 |

Composición química de la colada / Chemical Analysis of Heat

| MEDIDA<br>Measurement | OF     | COLADA<br>Cast No. | %<br>C | %<br>Cu | %<br>Mn | %<br>N | %<br>P | %<br>S | %<br>Si |
|-----------------------|--------|--------------------|--------|---------|---------|--------|--------|--------|---------|
| 88,90 0,00            | 141121 | 42180              | 0,160  | 0,070   | 0,810   | 0,010  | 0,017  | 0,030  | 0,210   |
| 38,10 0,00            | 141144 | 42201 AG           | 0,170  | 0,148   | 0,768   | 0,004  | 0,011  | 0,023  | 0,198   |
| 44,45 0,00            | 141143 | 42311 IS           | 0,170  | 0,000   | 0,650   | 0,000  | 0,015  | 0,027  | 0,310   |
| 60,33 0,00            | 141139 | 42291 IS           | 0,170  | 0,000   | 0,650   | 0,000  | 0,015  | 0,027  | 0,310   |
| 44,45 0,00            | 141273 | 42311 IS           | 0,170  | 0,000   | 0,650   | 0,000  | 0,015  | 0,027  | 0,310   |
| 74,61 0,00            | 141277 | 42282 RA           | 0,165  | 0,180   | 0,790   | 0,000  | 0,012  | 0,022  | 0,210   |
| 76,20 0,00            | 141278 | 42282 RA           | 0,165  | 0,180   | 0,790   | 0,000  | 0,012  | 0,022  | 0,210   |
| 44,45 0,00            | 141426 | 42311 IS           | 0,170  | 0,000   | 0,650   | 0,000  | 0,015  | 0,027  | 0,310   |
| 88,90 0,00            | 141418 | 42180              | 0,160  | 0,070   | 0,810   | 0,010  | 0,017  | 0,030  | 0,210   |
| 101,60 0,00           | 916872 | 41627              | 0,160  | 0,190   | 0,810   | 0,000  | 0,017  | 0,015  | 0,210   |
| 74,61 0,00            | 141420 | 42282 RA           | 0,165  | 0,180   | 0,790   | 0,000  | 0,012  | 0,022  | 0,210   |
| 34,93 0,00            | 141601 | 42320 IS           | 0,170  | 0,000   | 0,670   | 0,000  | 0,022  | 0,022  | 0,300   |
| 60,33 0,00            | 141604 | 42291 IS           | 0,170  | 0,000   | 0,650   | 0,000  | 0,015  | 0,027  | 0,310   |
| 36,51 0,00            | 916874 | 40277 IS           | 0,160  | 0,000   | 0,710   | 0,000  | 0,018  | 0,003  | 0,310   |
| 76,20 0,00            | 141605 | 42282 RA           | 0,165  | 0,180   | 0,790   | 0,000  | 0,012  | 0,022  | 0,210   |

Características mecánicas / Mechanical properties



ARANA Y LUPARDO, 2  
48490 UGAO-MIRAVALLÉS/VIZCAYA (SPAIN)  
Tfno.: 946480211  
Fax: 946480128  
Email: calpradera@calibradospradera.es  
www.calibradospradera.es

## CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 50152

ALBARAN 50152  
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE  
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

| MEDIDA<br>Measurement | OF | COLADA<br>Cast Nr. | Resistencia<br>Tens. strength<br>N/mm <sup>2</sup> | Lím.elástico<br>Yield point<br>0,2% N/mm <sup>2</sup> | Alargamiento<br>Elongation<br>Lo=50 mm. | Dureza HB<br>Hardness<br>HB |
|-----------------------|----|--------------------|--|---|---|-----------------------------|
| 88,90                 |    | 141121 42180       | 458,00   | 301,00  | 30,00                                   | 135,00                      |
| 38,10                 |    | 141144 42201 AG    | 473,00   | 0,00  | 0,00                                    | 0,00                        |
| 44,45                 |    | 141143 42311 IS    | 0,00   | 0,00  | 0,00                                    | 142,00                      |
| 60,33                 |    | 141139 42291 IS    | 0,00   | 0,00  | 0,00                                    | 137,00                      |
| 44,45                 |    | 141273 42311 IS    | 0,00   | 0,00  | 0,00                                    | 142,00                      |
| 74,61                 |    | 141277 42282 RA    | 480,00   | 299,00  | 34,50                                   | 0,00                        |
| 76,20                 |    | 141278 42282 RA    | 480,00   | 299,00  | 34,50                                   | 0,00                        |
| 44,45                 |    | 141426 42311 IS    | 0,00   | 0,00  | 0,00                                    | 142,00                      |
| 88,90                 |    | 141418 42180       | 458,00   | 301,00  | 30,00                                   | 135,00                      |
| 101,60                |    | 916872 41627       | 478,00   | 306,00  | 33,20                                   | 148,00                      |
| 74,61                 |    | 141420 42282 RA    | 480,00   | 299,00  | 34,50                                   | 0,00                        |
| 34,93                 |    | 141601 42320 IS    | 0,00   | 0,00  | 0,00                                    | 143,00                      |
| 60,33                 |    | 141604 42291 IS    | 0,00   | 0,00  | 0,00                                    | 137,00                      |
| 36,51                 |    | 916874 40277 IS    | 0,00   | 0,00  | 0,00                                    | 152,00                      |
| 76,20                 |    | 141605 42282 RA    | 480,00   | 299,00  | 34,50                                   | 0,00                        |

Calidad Superficial

| DESCRIPCIÓN<br>Description | OF | Clase<br>EN 10277-1 |
|----------------------------|----|---------------------|
|                            |    |                     |

Observaciones: BARRAS DE ACERO ESTIRADAS / TORNEADAS EN FRIO SIN ALEAR

DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.

QUALITY DEPARTMENT: Certify that the product fulfils the order specifications.

Fecha/Date: 20/12/2017

Firmado: Susana Fernández  
Directora de Calidad



Sistema de  
Gestión  
ISO 9001:2008

www.tuv.com  
D. 115066974

CO. 75960 DART

R4A-314

 NOV 10 2010  
 B. Bassa  
 Maglia

|   |                  |   |                  |   |               |               |               |               |               |               |               |               |
|---|------------------|---|------------------|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>ABS</b><br><b>ACCIAIERIE BERTOLI SAFAU</b><br><b>ABSOLUTE STEEL QUALITY</b><br><b>ACCIAIERIE BERTOLI SAFAU SpA</b><br><small>Via Buttrio 8/28 - Frazione Cargone - 33050 Pozzuolo del Friuli (UD)</small><br><small>Tel. +39 0432 613111 - Fax +39 0432 613209 - www.abraccia.it</small> |                  | <b>CERTIFICATO DI COLLAUDO</b><br><b>Inspection Certificate 3.1/Certificat de reception 3.1/</b><br><b>Abnahmeprüfzeugnis 3.1</b> |                  | N. 12057111<br>Data 09.04.2015<br>COLATA N. 2286994<br>Pag. 1/2 |               |               |               |               |               |               |               |               |
| <b>CLIENTE</b><br>Customer-Client-Besteller<br><b>MAGELLAN CORPORATION</b>  |                  | <b>ORDINE</b><br>Order-Commande-Bestellung<br><b>210327</b>   |                  |   |               |               |               |               |               |               |               |               |
| <b>PROFILO</b><br>Shape-Section-Profil<br><b>HOT ROLLED ROUND BARS, 82,55 MM - 3</b> ✓  |                  | <b>STATO DI FORNITURA</b><br>Delivery State-Etat de livraison<br><b>FULLY ANNEALED</b>  |                  |   |               |               |               |               |               |               |               |               |
| <b>ACCIAIO</b><br>Steel-Acier-Stahl<br><b>AISI 4140</b>   |                  | <b>Commissa/Pos</b><br><b>1029822/110</b>   |                  |   |               |               |               |               |               |               |               |               |
| <b>CAPITOLATO ABS:</b><br>Technical Specification:<br><b>ABS</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>CAPITOLATO DI ANALISI:</b><br>Material Specification:<br><b>MAGELLAN MIC 6016/2010 ADD.5 DEC.07-2014</b>   |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>CAPITOLATO DI FORNITURA:</b><br>Technical Delivery Requirements:<br><b>MAGELLAN MIC 6016-10 12.22.2010</b>   |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>COMPOSIZIONE CHIMICA %</b><br><b>CHEMICAL ANALYSIS % - COMPOSITION CHIMIQUE % - CHEMISCHE ZUSAMMENSETZUNG %</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
|   | C                | Mn  | Si               | P   | S             | Cr            | Ni            | Mo            | Al (T)        | Cu            | Sn            | Ti            |
| Min   | 0,400            | 0,75  | 0,15             |   | 0,020         | 0,80          |               | 0,15          | 0,020         |               |               |               |
| Max   | 0,430            | 1,00  | 0,35             | 0,035   | 0,040         | 1,10          | 0,25          | 0,25          | 0,050         | 0,35          | 0,100         | 0,0500        |
| Colata/Heat   | 0,408            | 0,84  | 0,27             | 0,011   | 0,021         | 1,04          | 0,14          | 0,23          | 0,021         | 0,22          | 0,010         | 0,0030        |
|   | B (T)            | V   | Nb               | As  | Ca            | Sb            | Co            | Pb            | O2/ppm        | H2/ppm        | D.I. INCH     |               |
| Min   |                  |   |                  |   |               |               |               |               |               |               | 5,40          |               |
| Max   | 0,0008           | 0,100   | 0,050            | 0,100   | 0,1000        | 0,100         | 0,300         | 0,1000        | 20,00         | 3,00          |               |               |
| Colata/Heat   | 0,0001           | 0,008   | 0,004            | 0,005   | 0,0005        | 0,001         | 0,021         | 0,0010        | 13,00         | 1,40          | 8,21          |               |
| <b>ASTM A255-10</b><br><b>VACUUM DEGAISED</b><br><b>CALCIUM ALUMINUM TREATED</b><br><b>ELECTRICAL FURNACE MELTED</b><br><b>ANALYSIS TOLERANCE ASTM A29/A29M-12</b><br><b>FINE GRAIN STEEL</b><br><b>FULLY KILLED</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>CARATT. MECCANICHE</b><br><b>MECHANICAL PROPERTIES - CARACTERISTIQUES MECANIQUE - MECHANISCHE EIGENSCHAFTEN</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>TRATTAMENTO TERMICO</b> HEAT TREATMENT   |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>DUREZZE</b><br><b>HARDNESS</b>   |                  |   |                  |   |               |               |               |               |               |               |               |               |
|   | SURFACE HARDNESS |   |                  |   |               |               |               |               |               |               |               |               |
| Min   |                  |   |                  |   |               |               |               |               |               |               |               |               |
| Max   | 212HB            |   |                  |   |               |               |               |               |               |               |               |               |
| Colata/Heat   | 195HB            |   |                  |   |               |               |               |               |               |               |               |               |
| <b>ACC. TO ASTM E10-12</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>PROVA JOMINY</b><br><b>JOMINY TEST - ESSAI JOMINY - STERNARSCHRECKVERSUCH</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
|   | J1/16" - HRC     | J2/16" - HRC  | J3/16" - HRC     | J4/16" - HRC  | J5/16" - HRC  | J6/16" - HRC  | J7/16" - HRC  | J8/16" - HRC  | J9/16" - HRC  | J10/16" - HRC | J11/16" - HRC | J12/16" - HRC |
| Min   | 55               | 55  | 54               | 53  | 53            | 52            | 51            | 50            | 49            | 47            | 46            | 44            |
| Max   | 60               | 60  | 60               | 59  | 59            | 58            | 58            | 57            | 57            | 56            | 56            | 55            |
| Colata/Heat   | 58,2             | 57,9  | 57,8             | 57,5  | 67,1          | 58,4          | 55,4          | 54,8          | 53,9          | 53,2          | 52,6          | 52,1          |
|   | J13/16" - HRC    | J14/16" - HRC   | J15/16" - HRC    | J16/16" - HRC   | J17/16" - HRC | J18/16" - HRC | J19/16" - HRC | J20/16" - HRC | J21/16" - HRC | J22/16" - HRC | J23/16" - HRC | J24/16" - HRC |
| Min   | 42               | 41  | 40               | 39  | 37            | 36            | 35            | 34            | 34            | 34            | 33            | 33            |
| Max   | 53               | 54  | 54               | 53  | 52            | 51            | 49            | 48            | 47            | 46            | 45            | 44            |
| Colata/Heat   | 51,1             | 50,1  | 49,3             | 48,4  | 48,7          | 44,9          | 43,3          | 41,9          | 40,6          | 39,3          | 38,5          | 37,6          |
| <b>HARDENABILITY INCH-HRC ACC. TO ASTM A304 - A255*</b>   |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>AUSTENITIZING TEMPERATURE 850°C</b>  |                  |   |                  |   |               |               |               |               |               |               |               |               |
| <b>INCLUSIONI NON METALLICHE</b><br><b>NON METALLIC INCLUSION - INCLUSIONS NON METALLIQUES - PRUFUNG NICHTMETALLISCHE EINSCHLUSSE</b>   |                  |   |                  |   |               |               |               |               |               |               |               |               |
|   | Tipo A<br>Type A | Tipo B<br>Type B  | Tipo C<br>Type C | Tipo D<br>Type D  |               |               |               |               |               |               |               |               |
| Fine<br>Thin  | 2                | 0   | 0                | 1   |               |               |               |               |               |               |               |               |
| Grasso<br>Heavy   | 1                | 0   | 0                | 0,5   |               |               |               |               |               |               |               |               |

PHOENIX TUBE COMPANY, INC.  
Manufacturer of Stainless Ornamental and Structural Tubing

CERTIFICATION OF TEST

PO. 13903

CUSTOMER ORDER#: C104124

CUST REF NBR:

DATE SHIPPED: 06/09/16

SIZE: 1-3/4RD X 11GA AW

SOURCE: USA

VENDOR: NAS

Phone# 5492603

Ext:

ORDER#: 398480

QTY SHIPPED: 540.0

GRADE: 304L

WELD: TIG

HEAT#: Y0L6

TEST REPORT#: TR013131

Report Date: 02/19/16

Specification:

ASTM A554-15A

ASTM-A 240-15b

MFG USING

ANNEALED, AND SHOWS NO

1900F WATER QUENCHED.

T304L/304 DUAL CERTIFIED MT NO WELD REPAIR

RAW MATERIAL SPEC.

ANNEALED AND PICKLED

CONTINUOUS CARBIDE

UNS# 30400 / 30403

RoHS COMPLIANT

PLATE, SHEET OR STRIP

PRECIPITATION.

AISI 304L

EN 10204 2.2

NACE MR0175/01

MATERIAL IS FULL SOLUTION

MIN. SOLUTION ANNEAL TEMP

MERCURY IS NOT USED BY US AS AN ALLOYING MATERIAL NOR IS METALLIC MERCURY HANDLED IN THE VICINITY OF OUR PROCESSING LINES. MATERIAL IS FREE OF MERCURY CONTAMINATION.

Chemical Analysis

| C   | MN   | P   | S    | SI  | CR    | NI   | MO  | CU  | CO  | N2  | TI  |
|-----|------|-----|------|-----|-------|------|-----|-----|-----|-----|-----|
| .01 | 1.74 | .03 | .012 | .25 | 18.20 | 8.03 | .31 | .34 | N/A | .09 | N/A |

Physical Analysis

|          | YIELD |     | TENSILE |     | OTHER      |            |
|----------|-------|-----|---------|-----|------------|------------|
| Hardness | PSI   | MPA | PSI     | MPA | Percent EL | Percent RA |
| RB 85    | 46870 | N/A | 94020   | N/A | 49         | N/A        |

THE CHEMICAL ANALYSES ARE CORRECT AS CONTAINED IN OUR CORPORATE RECORDS.

PHYSICAL PROPERTIES ARE DETERMINED WHILE MATERIAL IS IN STRIP FORM.

THIS MATERIAL INCLUDING THE BILLETS, WAS

Melted & MFG in USA DFARS 252.225 Subsection Compliant, FAR BAA, DFAR BAA, FAR TAA Complies

CERTIFIED BY Inventory Control Dept.

*Jane L. L...*

1185 WIN DR, BETHLEHEM, PA., 18017 - (610) 865-5337

FAX NUMBER: 610-865-4073

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